Attachment 11: Anticipated Residue Determination for Acute Dietary Assessment

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
ROOT and TUBER VEGETABLES					
Carrots (Parent only)	PDP -Parent	The composite PDP data is directly input incorporating %CT.	1%	RDF 9	Adjustment Factor[1]
Canned Carrots	Fresh Carrot PDP Data	Canned carrots uses an average of composite PDP data incorporating %CT.		0.00016	
Potatoes (Parent Only)	PDP -Parent	No detectable residues found in PDP data. ½ LOD is used for all non-detects incorporating %CT.	2%	RDF 27	Adjustment Factor[1]
	* FDA - Parent				
Canned and Dried Potatoes	Fresh Potato PDP Data	Average of composite PDP data is used with no further adjustment for %CT.		Canned: 0.000042	
				Dried: 0.0021	
Sweet Potatoes (Parent Only)	PDP -Parent	The composite PDP data is directly input incorporating %CT.	21%	RDF 30	Adjustment Factor[1]
	* FDA - Parent				
Canned Sweet Potatoes	Fresh Sweet Potato PDP Data	Canned sweet potatoes uses an average of composite PDP data incorporating %CT.		0.00037	
Sugar Beets (Parent + Metabolite)	Field Trial Data	No detectable residues found in field trial data. LOD is used incorporating %CT.	1%	0.000167	Adjustment Factor[1]
Turnips (Parent + Metabolite)	*Translated from Carrots*	*The composite carrot PDP data is directly input incorporating turnip %CT.*	1%	RDF 33	Adjustment Factor[1]
Turnip Greens (Parent + Metabolite)	Field Trial Data	Turnip FT data is used incorporating %CT.	7%	RDF 32	Adjustment Factor[1]
Canned Turnip Greens	Fresh Turnip Green FT Data	Average of field trial data is used incorporating %CT.		0.000467	

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
BULB VEGETABLES					
Bulb Onions (Parent + Metabolite)	FDA -Parent + Metabolite	No detectable residues found in FDA data. ½ LOD is used for all non-detects incorporating %CT.	9%	RDF 6	Adjustment Factor[1]
Canned Onion	Fresh Bulb Onion FDA Data	Average of composite bulb onion FDA data is used incorporating %CT.		0.00033	
Green onions (Parent + Metabolite)	Field Trial Data	Green onion FT data is used incorporating %CT.	9%	RDF 7	Adjustment Factor[1]
LEAFY VEGETABLES (EXCEPT BRASSICA)					
Celery (Parent + Metabolite)	PDP -Parent * FDA - Parent + Metabolite	The composite PDP data is directly input incorporating %CT.	1%	RDF 11	Adjustment Factor[1]
Canned Celery and Celery Juice	Fresh Celery PDP data	Average of composite celery PDP data is used incorporating %CT.1%		0.00009	
Lettuce (Parent + Metabolite)	PDP -Parent * FDA - Parent + Metabolite	No detectable residues found in PDP data. ½ LOD is used for all non-detects incorporating %CT.	1%	RDF 23	Adjustment Factor[1]
Canned Lettuce	Fresh Lettuce PDP Data	Average of composite lettuce PDP data is used incorporating %CT.		0.00005	
Spinach (Parent + Metabolite)	PDP -Parent * FDA - Parent + Metabolite	The composite PDP data is directly input incorporating %CT.	5%	RDF 28	Adjustment Factor[1]
Canned Spinach	PDP -Parent canned	The composite PDP data is directly input incorporating %CT.		RDF 29	

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
BRASSICA (COLE) LEAFY VEGETABLES					
Broccoli (Parent + Metabolite)	PDP -Parent	No detectable residues found in PDP data. LOD is used for all non-detects incorporating %CT.	1%	RDF 4	Adjustment Factor[1]
	* FDA - Parent + Metabolite				
Canned Broccoli	Fresh Broccoli PDP Data	Average of composite broccoli fresh PDP data is used incorporating %CT.		0.000049	
Brussels Sprouts (Parent + Metabolite)	*Translated from Spinach*	*The composite spinach PDP data is directly input incorporating brussels sprouts %CT.*	1%	RDF 5	Adjustment Factor[1]
	* FDA - Parent + Metabolite				
Cabbage (Parent + Metabolite)	*Translated from Spinach*	*The composite spinach PDP data is directly input incorporating cabbage %CT.*	4%	RDF 8	Adjustment Factor[1]
	* FDA - Parent + Metabolite				
Canned Cabbage	*Translated from Spinach*	*Average of composite spinach PDP data is used incorporating cabbage %CT.*		0.00032	
Cauliflower (Parent + Metabolite)	*Translated from Broccoli*	*No detectable residues found on broccoli. LOD is used for all non-detects incorporating cauliflower %CT.*	1%	RDF 10	Adjustment Factor[1]
Collards (Parent + Metabolite)	*Translated from Spinach*	*The composite spinach PDP data is directly input incorporating collard %CT.*	2%	RDF 13	Adjustment Factor[1]
Canned Collards	*Translated from Spinach*	*Average of composite spinach PDP data is used incorporating collard %CT.*		0.00024	
Kale (Parent + Metabolite)	*Translated from Spinach*	*The composite spinach PDP data is directly input incorporating kale %CT.*	2%	RDF 22	Adjustment Factor[1]
Canned Kale	*Translated from Spinach*	*Average of composite spinach PDP data is used incorporating kale %CT.*		0.00016	
Mustard Greens (Parent + Metabolite)	*Translated from Spinach*	*The composite spinach PDP data is directly input incorporating mustard green %CT.*	2%	RDF 24	Adjustment Factor[1]

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
LEGUME VEGETABLES					
Dried Beans (Parent + Metabolite)	FDA - Parent + Metabolite	No detectable residues found in FDA data. ½ LOD is used incorporating %CT.	3%	0.0033	Adjustment Factor[1]
Succulent Beans (Parent + Metabolite)	PDP -Parent	The composite green bean PDP data is directly input incorporating succulent bean %CT.	4%	RDF 18	Adjustment Factor[1]
	* FDA -Parent + Metabolite				
Frozen Succulent Beans	PDP -Parent frozen only	The composite frozen green bean PDP data is directly input incorporating succulent bean %CT.		RDF 19	
Canned Succulent Beans	Fresh Green Bean PDP Data	Average of composite green bean PDP data is used incorporating succulent bean %CT.		0.00026	
Dried Lima Beans (Parent + Metabolite)	*Translated from Dried Beans*	*No detectable residues found in dried bean FDA data. ½ LOD is used incorporating %CT.*	3%	0.0033	Adjustment Factor[1]
Succulent Lima Beans (Parent + Metabolite)	*Translated from Succulent Beans*	*The composite green bean PDP data is directly input incorporating succulent bean %CT.*	4%	RDF 18	Adjustment Factor[1]
Frozen Succulent Lima Beans	*Translated From Frozen Succulent Beans*	*The composite frozen green bean PDP data is directly input incorporating succulent lima bean %CT.*		RDF 19	
Canned Succulent Lima Beans	*Translated from Succulent Beans*	*Average of composite green bean PDP data is used incorporating succulent bean %CT.*		0.00026	
Lentils (Parent + Metabolite)	*Translated from Soybean*	*No detectable residues found on soybeans. LOD is used with no further adjustment for %CT.*	1%	0.0036	Adjustment Factor[1]
Dried Peas (Parent + Metabolite)	FDA - Parent + Metabolite	Average of composite dried bean FDA data is used with no further adjustment for %CT.	3%	0.006	Adjustment Factor[1]

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
Succulent Peas (Parent + Metabolite)	PDP -Parent * FDA -Parent + Metabolite	The composite PDP data is directly input incorporating %CT.	4%	RDF 26	Adjustment Factor[1]
Canned Succulent Peas	PDP -Parent frozen/can	The composite frozen/canned peas PDP data is directly input incorporating %CT.		0.00020	
Crop	**Source of Data**	**Residue Data Used**	**% Crop Treated**	**Acute Residue (ppm)**	**Adjustment Factor (ppm)**
Soybean Grain (Parent)	PDP -Parent * FDA - Parent + Metabolite	No detectable residues found. ½ LOD is used for all non-detects with no further adjustment for %CT.	1%	0.0018	Soybean Meal[2]: 0.3x Refined Soybean Oil[2]: 3x
FRUITING VEGETABLES					
Tomatoes (Parent + Metabolite)	PDP -Parent * FDA - Parent + Metabolite	The composite PDP data is directly input incorporating %CT.	1%	RDF 31	Adjustment Factor[1] Juice[2]: 0.06x Puree[2]: 0.12x Catsup[2]: 0.06x Paste[2]: 0.12x
Canned and Processed Tomatoes	Fresh Tomato PDP Data	Average of composite PDP data is used incorporating %CT.		0.000062	
POME FRUITS					
Apples (Parent + Metabolite)	*Translated from Single Serving Pear PDP Data*	*The single serving pear PDP data is directly input incorporating apple %CT.*	25%	RDF 35	Adjustment Factor[1]
Canned Apples	Composite Apple PDP Data	Average of composite fresh apple PDP data is used incorporating %CT.		0.00171	
Apple Juice (Parent + Metabolite)	PDP- Parent	The composite PDP data is input directly with no further adjustment for %CT.		RDF 2	Adjustment Factor[1] Juice[3]: 1x Conc.[3]: 3x

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
Pear(Parent + Metabolite)	PDP -Parent Single Serving	The single serving PDP data is input directly incorporating %CT.	14%	RDF 1	Adjustment Factor[1]
	*PDP-Parent Composite				
	*FDA-Parent + Metabolite				
Canned Pear	Composite Pear PDP Data	Average of composite fresh pear PDP data is used incorporating %CT.		0.00139	
Pear Juice (Parent + Metabolite)	*Translated from Apple Juice Data*	*The composite apple juice PDP data is directly input incorporating pear %CT.*		RDF 2	Adjustment Factor[1] Juice[3]: 1x Conc.[3]: 3x
STONE FRUITS					
Cherries (Parent + Metabolite)	FDA - Parent + Metabolite	The composite FDA data is directly input incorporating %CT.	11%	RDF 12	Adjustment Factor[1]
	* Field Trial Data				
Canned Cherries and Cherry Juice	Fresh Cherry FDA Data	Average of composite fresh cherry FDA data is used incorporating %CT.	11%	0.00287	Adjustment Factor[1]
Nectarines (Parent + Metabolite)	*Translated from Fresh Peaches*	*The composite fresh peach PDP data is decomposited incorporating nectarine %CT.*	18%	RDF 25	Default Concentration Factor
Peaches (Parent + Metabolite)	PDP -Parent	The composite PDP data is decomposited incorporating %CT.	39%	RDF 14	Adjustment Factor[1]
	* FDA - Parent + Metabolite				
Peach Juice	Fresh Peach PDP Data	Average of composite peach PDP data is used incorporating %CT.		0.01703	
Canned Peaches	PDP -Parent canned	No detectable residues found. LOD is used for all non-detects incorporating %CT.		RDF 15	
				0.00234	
Plums (Parent + Metabolite)	FDA - Parent + Metabolite	No detectable residues found. LOD is used for all non-detects incorporating %CT.	31%	RDF 20	Adjustment Factor[1]

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
Canned Plums and Prune Juice	Fresh Plum FDA Data	No detectable residues found. LOD is used incorporating %CT.		0.00102	
TREE NUTS					
Almonds (Parent + Metabolite)	Field Trial Data	Almond FT data is used incorporating %CT.	2%	RDF 36	Adjustment Factor[1]
Pecans (Parent)	Field Trial Data	No detectable residues found in Pecan FT data. ½ LOD is used incorporating %CT.	2%	RDF 37	Adjustment Factor[1]
Walnuts (Parent)	Field Trial Data	No detectable residues found in walnut FT data. ½ LOD is used incorporating %CT.	12%	RDF 38	Adjustment Factor[1]
CEREAL GRAINS					
Barley (Parent + Metabolite)	*Translated from Wheat*	*Average of composite wheat PDP data is used with no further adjustment for %CT.*	1%	0.00722	Adjustment Factor[1]
Sweet Corn (Parent Only)	PDP -Parent frozen/can	No detectable residues found. ½ LOD is used for all non-detects incorporating %CT.	7%	RDF17	Adjustment Factor[1]
	FDA-Parent fresh	No detectable residues found. ½ LOD is used for all non-detects incorporating %CT.		RDF 16	
Oats (Parent + Metabolite)	*Translated from Wheat*	*Average of composite wheat PDP data is used with no further adjustment for %CT.*	1%	0.00722	Adjustment Factor[1]
Polished Milled and Brown Rice (Parent + Metabolite)	FDA - Parent + Metabolite	Average of composite FDA data is used incorporating LOD for all non-detects with no further adjustment for %CT.	12%	0.00430	Adjustment Factor[1] Polished Milled Rice[4]: 0.04x Brown Rice[4]: 0.18x
	* Field Trial Data				
Rye (Parent + Metabolite)	*Translated from Wheat*	*Average of composite wheat PDP data is used incorporating LOD with no further adjustment for %CT.*	1%	0.00722	Adjustment Factor[1] Germ[2]: 2x
Wheat (Parent + Metabolite)	PDP -Parent	Average of composite PDP data is used incorporating LOD for all non-detects with no further adjustment for %CT.	2%	0.00722	Adjustment Factor[1] Germ[2]: 2x Flour[2]: 0.4x
	* FDA - Parent + Metabolite				
MISCELLANEOUS CROPS					

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
Artichokes (Parent + Metabolite)	Field Trial Data	Artichoke FT data is used incorporating %CT.	1%	RDF3	Adjustment Factor[1]
Cottonseed Meal (Parent + Metabolite)	Field Trial Data	Average FT data is used, 3.0ppm for TX and 1.15ppm for US, incorporating the TX %CT, US %CT, and portions of the crop grown in each area.	TX 6% US 17%	0.25	Adjustment Factor[1] Seed Meal[5]: 0.09x Seed Oil: 1x
Cottonseed Oil (Parent)	FDA - Parent	No detectable residues found. ½ LOD is used for all non-detects with no further adjustment for %CT. (Note: Only 2 samples were found for seed oil, but 39 samples were found for seed.)	17%	0.02	
Grapes (Parent + Metabolite)	PDP - Parent	Composite PDP data is input directly incorporating %CT.	2%	RDF 21	Adjustment Factor[1] Juice[3]: 1x Conc.[3]: 3x
	* FDA - Parent + Metabolite				
Canned Grapes, Grape Wine and Sherry	Fresh Grape PDP Data	Average of composite grape PDP data is used incorporating %CT.		0.00165	
Grape Juice	Grape Juice FDA Data	No detectable residues found. ½ LOD is used for all non-detects with no further adjustment for %CT.		RDF 34	
Hops (Parent + Metabolite)	Field Trial Data	Average of FT data is used incorporating %CT.	1%	0.00968	Adjustment Factor[1]
Rapeseed (Canola) (Parent + Metabolite)	Field Trial Data	Average of FT data is used incorporating %CT.	5%	0.00271	Adjustment Factor[1] Canola Oil[6]: 2x

Crop	Source of Data	Residue Data Used	% Crop Treated	Acute Residue (ppm)	Adjustment Factor (ppm)
Peanuts (Parent + Metabolite)	Field Trial Data	Average of FT data is used incorporating %CT.	1%	0.00017	Adjustment Factor[1] Peanut Oil[7]: 1x PeanutButter[7]: 1x
Sunflowers (Parent + Metabolite)	Field Trial Data	Average of FT data is used incorporating %CT.	1%	0.00017	Default Adjustment Factor

An asterisk (*) signifies supporting data only. These supporting data are not used for the calculation of anticipated residues in this assessment.

The FDA monitoring data used for cottonseed oil was not standard policy due to the limited number of samples.

The application rate for wheat will be increased requiring a raise in tolerance to 5ppm; therefore, the anticipated residue used in this assessment for wheat may underestimate the risk.

1. All commodities containing boiled, canned, or cooked (NFS) food forms incorporate an adjustment factor of 0.05x for those food forms. Snap Beans Canning Study - MRID No.: 44812901.
2. Residue Chemistry Chapter for the Methyl Parathion Reregistration Eligibility Decision (RED) Document. Bonnie Cropp-Kohlligian. 11/June/98.
3. The default processing factors are adjusted to incorporate the actual juice data, maintaining the default juice/juice concentrate ratio.
4. Rice Processing Study - MRID No.: 41596205.
5. Cottonseed Processing Study - MRID No.: 41596201. The anticipated residue for cottonseed are adjusted for the proposed SLN's in Texas.
6. Rapeseed (Canola) Processing Study - MRID No.: 42717601 and 42717602.
7. Peanut Processing Study - MRID No.: 42606003.